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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Tsutomu Okada

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SCULLY SCOTT MURPHY & PRESSER, PC
400 GARDEN CITY PLAZA
SUITE 300
GARDEN CITY, NY 11530

EXAMINER

YABUT, DIANE D

ART UNIT

PAPER NUMBER

3734

MAIL DATE

DELIVERY MODE

10/12/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/803,672	Applicant(s) OKADA, TSUTOMU	
	Examiner DIANE YABUT	Art Unit 3734	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 August 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 23-27, 29-32 and 34-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 23-27, 29-32 and 34-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is in response to applicant's amendment received on 08/02/2010.

The examiner acknowledges the amendments made to the claims.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 23-27, 36-37, 40-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Sugiyama et al.** (U.S. Pub. No. **2002/0177861**) in view of **Matsuno** (U.S. Patent No. **5,766,189**).

In Figures 45-49 Sugiyama et al. disclose a clip manipulating device comprising a flexible insertion tube **130** capable of being inserted into a cavity of a living body and having a curvedly raised portion at a distal end portion, a single flexible wire **131** having pliability and movable through the insertion tube, a junction **115** provided on a distal end portion of the wire, detachably coupled with a single clip **110** located at the distal end portion of the insertion tube for effecting grasping operation and disengaging operation of the clip, wherein the junction is pliable enough to follow substantial bending deformation of the insertion tube, such that movement in the tube is not hindered by the bending deformation, and the junction including a looped flexible wire (such as knot **115a** in Figure 21) of a predetermined length, one end which is coupled with the clip

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and a J-shaped coupling member **134** connected to the flexible wire, the coupling member having a coupling with the other end of the looped flexible wire, the coupling releasing the looped flexible wire (paragraph 160) and the looped flexible wire having a length between the clip such that one end of the looped flexible wire engaged with the clip may be entirely released from the distal end portion of the flexible insertion tube and the coupling member does not enter the curved portion of the flexible insertion tube (Figure 46). It is noted that while Figures 47-49 show that the clip is released when the coupling member **134** is at the distal end of an uncurved flexible insertion tube, the position of Figure 46 with the coupling member not entering the curved portion of the flexible insertion tube discloses a position in which the coupling between the coupling member **134** and the junction **115** and the clip **110** may be disengaged. A flexible tube sheath (channel) **150** penetrated by the insertion tube for advance and retreat is disclosed, and is capable of storing the clip located at the distal end portion of the insertion tube. It is also noted that the flexible insertion tube may be also considered to be **136** with a curvedly raised portion **120**, and the sheath may be **130**. The flexible insertion tube forms a push member **135** for advancing the clip.

Sugiyama et al. disclose the claimed device, including the coupling member being disengageable from the junction by moving the insertion tube and the flexible wire (paragraph 160), except for the coupling member having a deformable portion coupled with the junction looped wire, wherein deformation of the deformable portion releases the looped flexible wire, and wherein the coupling member also has a rigid portion which supports the deformable portion and is connected to the flexible wire and the rigid

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portion includes a hook which is not deformable, and the deformable portion includes a coupling portion which includes a J-shaped deformable anchor portion and which is removably supported by the hook and deformed into a straight portion.

Matsuno teaches a clip manipulating device in which a J-shaped deformable anchor portion **3A** (Figures 2A-2B) is deformed to release a coupling and is supported by a rigid portion **11** including a hook **15** which is not deformable (Figures 4-5).

It would have been obvious to one of ordinary skill in the art at the time of invention to make the J-shaped coupling member **134** a deformable anchor portion and be supported by a hooked rigid portion in Sugiyama et al., as taught by Matsuno, in order to facilitate disengagement of the coupling member with a pulling force instead of the need to move both the insertion tube and the flexible wire.

Sugiyama et al. also do not expressly disclose coupling member **134** having greater rigidity than looped flexible wire **115**, although it would have been obvious to one of ordinary skill in the art at the time of invention to provide a material with greater rigidity to elements proximal to the looped flexible wire to increase control of the device when steering.

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3. Claims 29-32, 34-35, and 38-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Sugiyama et al.** (U.S. Pub. No. **2002/0177861**) in view of **Foerster et al.** (U.S. Pub. No. **2002/0026201**).

Sugiyama et al. disclose the claimed device, as mentioned above in Figures 45-49, with the flexible looped wire **115** having one end coupled to the flexible wire **131** at a joint and the insertion tube **130** bent up to substantially 90 degrees by a forceps raising device, except for the looped flexible wire **115** having the other end coupled with the clip and being able to be broken to release the clip when the flexible wire is hauled with a tractive effort.

Foerster et al. teach a clip manipulating device in Figures 9-11 in which a looped flexible wire **18a** has one end coupled with a clip **12a** and is broken to release the clip as a result of a tractive effort.

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the coupling and the looped flexible wire junction of Sugiyama et al. to have one end of the looped flexible wire coupled with the clip and being able to be broken to release the clip, as taught by Foerster et al., in order to facilitate disengagement of the coupling member with a pulling force instead of the need to move both the insertion tube and the flexible wire.

Sugiyama et al. also do not expressly disclose the joint having greater rigidity than looped flexible wire **115**, although it would have been obvious to one of ordinary skill in the art at the time of invention to provide a material with greater rigidity to

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elements proximal to the looped flexible wire to increase control of the device when steering.

Response to Arguments

4. Applicant's arguments filed 08/02/2010 have been fully considered but they are not persuasive.

5. Applicant argues that the open-close hook 134 of Sugiyama is not deformable, which is acknowledged by the examiner (see above, page 3, line 2 of second paragraph) and that Figure 46 of Sugiyama teaches that the clip 110 is located within the tube and when the clip projects out in its entirety from the tube 130, the open-close hook 134 is located at the bended portion of the tube, and therefore the string 115 does not have a length such that the coupling member does not enter the curved portion of the flexible insertion tube when the clip is entirely released from the distal end portion. However, the location of the bent portion along the length of the tube is dependent upon the location of the bend in the endoscope tool channel into which the clip manipulating device is positioned, and therefore the string 115 may be of sufficient length to prevent the coupling member from being positioned within the bent portion of the insertion tube, depending on the channel bend which is not positively recited. Also, when the clip is "entirely released from the distal end portion of the flexible insertion tube," the flexible wire is retracted so that the coupling portion is not positioned in the bent portion, and therefore may read on the limitation.

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6. Matsuno does not disclose or suggest the technical concept of using a looped flexible wire. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. Matsuno is not relied upon to teach a looped flexible wire, but rather a deformable coupling portion.

7. Applicant also argues that Sugiyama does not disclose said insertion tube being bent up to substantially 90 degrees by a forceps raising device. However, Sugiyama discloses the insertion tube **130** in Figure 46 which may be bent up to substantially 90 degrees, and therefore less than but not exceeding substantially 90 degrees which is shown in Sugiyama.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to DIANE YABUT whose telephone number is (571)272-6831. The examiner can normally be reached on M-F: 9AM-4PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Todd Manahan can be reached on (571) 272-4713. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Diane Yabut/
Examiner, Art Unit 3734

/TODD E. MANAHAN/
Supervisory Patent Examiner, Art Unit 3734